USAID
FROM THE AMERICAN PEOPLE

MULTILATERAL DEVELOPMENT BANKS' ASSISTANCE PROPOSALS

Likely to Have Adverse Impacts on the Environment, Natural Resources, Public Health, and Indigenous Peoples

April 2012

Contents

This report does not prejudge the U.S. Government's position where final versions of projects or policies have not yet been considered by the Multilateral Development Bank (MDB) Executive Boards; rather, it serves as a record of USAID's environmental and social review and monitoring of MDB projects and policies.

Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment

Introduction

The U.S. Agency for International Development (USAID) submits this report entitled, "Multilateral Development Banks' Assistance Proposals Likely to Have Adverse Impacts on the Environment, Natural Resources, Public Health, and Indigenous Peoples," in compliance with Title XIII of the International Financial Institutions (IFI) Act, as enacted in Section 537 of Public Law 100-202. These provisions instruct USAID to report to Congress on proposed and current Multilateral Development Bank (MDB) projects, and other assistance proposals likely to have adverse impacts on the environment, natural resources, public health, or indigenous peoples.

This report covers a six-month period (August 2011 through January 2012) and provides information regarding USAID's performance of its tasks as assigned by Title XIII of the IFI Act to the Committee on Appropriations, the Committee on Foreign Affairs, and the Committee on Financial Services of the U.S. House of Representatives; and the Committee on Appropriations, the Committee on Banking, Housing and Urban Affairs, and the Committee on Foreign Relations of the U.S. Senate.

Title XIII directs USAID to collaborate with other U.S. Government (USG) agencies to review MDB assistance proposals to determine whether the proposals will contribute to the borrowing/project country's sustainable development. The reviews address the potential adverse effects of proposed projects on the environment, natural resources, public health, and indigenous peoples. USAID and partner reviewing agencies have the responsibility for making recommendations, including proposing alternative measures, which could eliminate or mitigate adverse impacts. After evaluating MDB proposals, USAID undertakes an affirmative investigation of selected projects that may have substantial adverse impacts, and the resulting information is made available to interested members of the public. USAID provides its findings from this process to the U.S. Department of Treasury and to Congress.

USAID/Washington continues to work with its regional bureaus and field missions and other USG agencies, including the Department of Treasury, the Department of State, the Environmental Protection Agency, and the U.S. Executive Directors' Offices at the MDBs to complete the following tasks:

- Provide adequate attention to priority MDB projects;
- Engage with project sponsors, MDB staff, civil society, and communities affected by MDB projects; and
- Engage early in the proposal process with project countries, sponsors, and MDB staff.

MDB Project Review

MDB projects with the potential for adverse environmental and social impacts are initially identified by USAID field missions, USG agencies, and/or non-governmental organizations (NGOs). The criteria for selecting identified MDB projects for review include consideration of the following project characteristics:

- Potential adverse impacts on the environment, natural resources, public health, and/or indigenous peoples;
- Ability to serve as a model within a sector for similar projects;
- Potential adverse environmental and social cumulative impacts; and
- Potential to undermine USAID's sustainable development activities.

The MDB projects selected by USAID, in consultation with other USG agencies, for review during the period covered in this report are either candidates for financing or have been approved for financing by the African Development Bank (AfDB); the International Bank for Reconstruction and Development (IBRD), the Multilateral Investment Guarantee Agency (MIGA) and/or the International Finance Corporation (IFC)–collectively, the World Bank Group (WBG); the Asian Development Bank (ADB); and/or the European Bank for Reconstruction and Development (EBRD). Projects reviewed in this report fall into one of the four following categories:

1. MDB Public Disclosure Projects. Projects for which respective MDB institution(s) have publicly released final Environmental Impact Assessments (EIAs) prior to Board[1] vote, and/or Board vote is expected within the next six to nine months and/or whose potential adverse environmental and social impacts have been identified by USAID/Washington, USAID field missions, other USG agencies, and/or NGOs. This report includes the following projects in this category:

- Nepal – Kabeli A Hydropower Project
- Laos – Nam Ngum 3 Hydropower Project
- Mongolia – Oyu Tolgoi Copper-Gold Mine Project

2. MDB Post-finance Monitoring Projects. Project(s) previously reviewed by USAID with potentially significant environmental and social impacts, or projects discussed during Tuesday Group.[2] These projects are referred to in this report as Post-finance Monitoring Projects. This report describes the following project in this category:

- Laos – National Route 3

3. MDB Streamlined Procedure Projects. Under this procedure, projects are placed on the agenda of the Board of Executive Directors. A project is considered approved without prior discussion, unless an Executive Director requests that it should be discussed.

- Cambodia, Laos, Vietnam – Biodiversity Conservation Corridors Initiative, Phase 2
- Indonesia – Regional Roads Development Project

[1] The Board of Executive Directors (the Board) is made up of representatives of the Bank's member countries that appoint them or elect them.

[2] Tuesday Group is a monthly meeting of NGOs and USG agencies, co-chaired by USAID and the Bank Information Center, to address MDB project loans and policies.

4. MDB Watch List. This list includes: 1) technical assistance or studies that have the potential to lead to additional MDB or private sector financing for project development and/or 2) projects under discussion with various MDBs, but where a management decision has not been made to bring these projects into the MDB formal appraisal process, or where the Board date is pending (or not imminent). Projects in this category include the following:

- Multinational: Study on the Ouesso-Bangui-N'djamena Road and Inland Navigation on the Congo, Oubangui and Sangha Rivers
- Laos – Nam Ngiep 1 Hydropower Project
- Laos – Nabong 500 kV Substation and Transmission Facility Project
- Mozambique – Regional Transmission Project
- Nepal – Upper Seti Hydropower Project

USAID's experience has shown that waiting for MDBs to release final project EIAs often results in inadequate opportunities and unsatisfactory results in identifying, averting, or mitigating negative environmental and social impacts. Therefore, to increase the effectiveness of the oversight process, USAID continues to pursue earlier engagement in the MDB project proposal process. However, earlier engagement does not preclude the need to interact with relevant stakeholders during the latter stages of the project proposal process when all of the environmental and social documentation is available.

MDB Policies, Guidelines, Strategies, and Action Plans. In addition to reviewing MDB projects, USAID takes part in the Department of Treasury-led interagency process of reviewing MDB policies, guidelines, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important that they contain adequate provisions to ensure environmentally and socially sound projects. This report provides preliminary information on the status for the following reviews:

- African Development Bank – Environmental and Social Safeguard Polices
- World Bank – Environmental and Social Safeguard Policies

Report structure: This report is divided into the following sections:

Section 1: **MDB Public Disclosure Projects**
Section 2: **MDB Post-finance Monitoring Projects**
Section 3: **MDB Streamlined Procedure Projects**
Section 4: **MDB Watch List**
Section 5: **MDB Policies, Guidelines, Strategies, and Action Plans**
Annex:

Republic of Congo – The Ouesso-Bangui-N'djamena Road and Inland Navigation on the Congo, Oubangui and Sangha Rivers Trip Report (October 2011)

Laos – National Route 3 (December 2011)

Section 1
MDB Public Disclosure Projects

USAID's technical review identifies outstanding Title XIII environmental and social issues (environment, natural resources, public health, and indigenous peoples, as under Section 1303), and assesses the adequacy of the EIAs according to the Pelosi Amendment (Section 1307). Following each completed review, USAID develops recommendations regarding potential loan conditions in an attempt to prevent and mitigate potential environmental and social impacts and provides an assessment of the EIA to the U.S. Department of Treasury for its consideration.

Nepal

- *Kabeli 'A' Hydropower Project*

Project Description

WB proposed financing for the Kabeli 'A' Hydropower Project consists of two components: 1) the Kabeli 'A' Hydropower Project and 2) technical assistance to the Ministry of Energy.

The first component – the Kabeli 'A' Hydropower Project (KAHEP), in addition to six other hydropower projects, was identified for future development by the Government of Nepal (GoN) following a screening and ranking process of 138 candidate hydropower projects during the period of 1996/97. On January 31, 2010, the GoN and the project company, Kabeli Energy Limited (KEL – majority-owned by Butwal Power Company (Nepal)), signed the Project Development Agreement. Other partners in the project include SCPHI (Canadian) and APP (China).

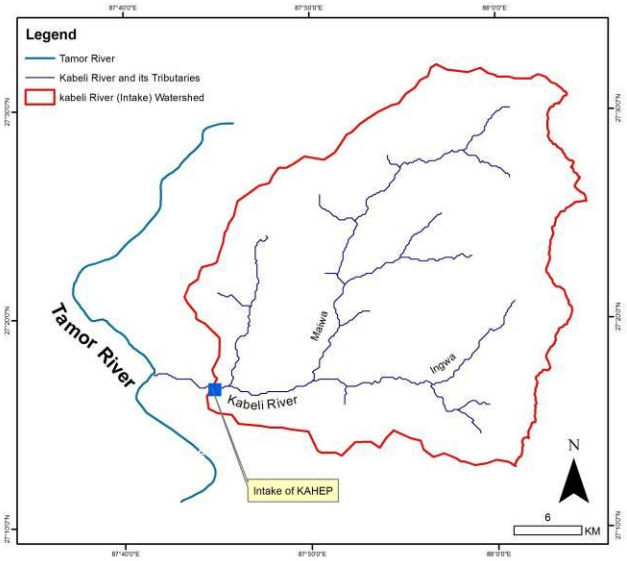
The KAHEP will be developed in the Kabeli River Basin in Panchthar and Taplejung districts in eastern Nepal. The Kabeli River Basin is 870 km^2, and the Kabeli River is about 57 km in length. The Kabeli River is one of the tributaries of the Tamor River, a major river of the Sapta Koshi Basin which drains into the Ganges River.

The project is designed as a peaking run-of-river with a proposed installed capacity of 37.6 MW for domestic use. The dam site is located in the jurisdiction of the Amarpur Village Development Committee, about 5.6 km upstream of its confluence with the Tamor River. The dam will consist of a 14.3 m high and 60 m long gated barrage with intake, settling basin and an underground settling basin on the left bank of the Kabeli River near Dhuseni village. At full supply water level of 575.3 m, the pondage area will cover a surface area of 10.6 ha. The length of the pond at full supply level will be 1.385 km with an average width of 78.44 m. The plant has been designed as a six-hour peaking plant, but at reduced capacity of 26.5 MW during the

month of the lowest mean monthly flow. The peaking is planned for twice a day with two hours in the morning and four hours in the evening.

The power from the proposed project will be evacuated by the Kabeli Corridor 132 kV Transmission Line, which is under implementation by the Nepal Electricity Authority with financing from the WB – International Development Association (IDA). This transmission line will provide evacuation capacity for the power generated by other hydropower projects in the Kabeli corridor that are being developed by other independent power producers. These generation and transmission projects represent an opening up of eastern Nepal to the national power grid.

Depending on the availability of funds (approximately $10 million) and the need (to be determined), the project could include provision of access to electricity for residents in the project area who presently do not have access to electricity. However, per-household connection costs are expected to be very high due to the sparse population and the likely low demand of households in the area. Project documents indicate that these factors will limit the scope of the electrification that can be carried out with IDA funding.



In addition to KAHEP, there are seven other hydropower projects in various stages of consideration to be developed in the Kabeli River Basin. A total of three projects will be on the Kabeli River with the remaining on tributaries. All of these projects are located upstream of the KAHEP. In total, it is anticipated that these projects will eventually make possible the evacuation of approximately 170 MW.

The second component of the financing package is technical assistance funds to the Ministry of Energy (MOE) to allow it to perform its technical due diligence on behalf of the GoN. This will include MOE engaging supervising engineers and other experts, as required, to carry out supervision of the implementation of the hydropower project. Funds may also be used for technical assistance related to Kabeli River strategic basin level planning studies, or cumulative impact assessments, in areas consistent with the Department of Electricity Development responsibilities.

Financing

Total project costs are estimated at approximately $86 million. The proposed WB IDA financing is for $40 million for the hydropower plant and $2 million for the Ministry of Energy component. If approved, the IDA funds will be used to finance the civil works contracts implemented by Kabeli Energy Limited. IDA funds will not be used for land acquisition or to finance the Social Action Plan or Environmental Management Plan. It is unclear from where the remaining $44 million required to fund this project will come.

USAID Review

USAID has initiated its technical review of this project. General concerns at this time include: 1) the adequacy of the "no project scenario" in the alternatives analysis'; 2) adequacy of aquatic and terrestrial biodiversity baseline data for direct, indirect, and cumulative impact analyses, including the types of habitat that will be impacted; 3) cumulative impacts analysis; 4) associated facilities impacts; and 5) adequacy of mitigation measures (e.g., fish ladder). Other specific concerns include the absence of: 1) a comparable technical assistance component for the Ministry of Environment and support for watershed management in the Basin and 2) a plan for financing the Social Action Plan and Environmental Management Plan.

Current Status

The WB Board date is projected for mid-May 2012.

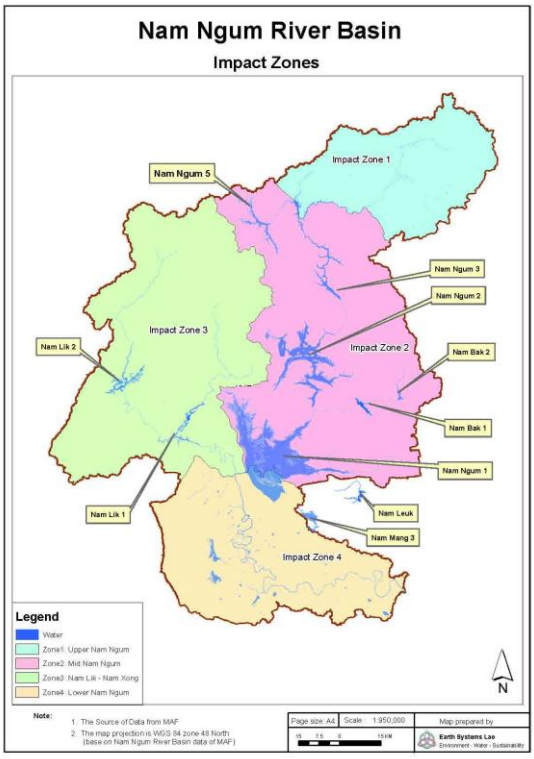
LAOS

Nam Ngum 3 Hydropower Project

Project Description

The Nam Ngum 3 (NN3) Hydropower Project is one of a number of planned hydropower projects in various stages of development either in the Nam Ngum Basin or related to the basin (e.g., interbasin transfer), in central Laos. Nam Ngum 1, the first dam on the Nam Ngum, a tributary of the Mekong, has been in operation since 1970, producing 1,150 MW. Nam Leuk has been in operation since 2000, producing 60 MW. Nam Mang 3 has been in operation since 2004, producing 40 MW. Nam Ngum 2, located on the Nam Ngum between Nam Ngum 1 and Nam Ngum 3, is currently under construction and expected to produce 615 MW. There are an additional four projects with signed Memorandums of Understanding (MOUs), and two with signed concession agreements.

The NN3 dam site is located on mainstream Nam Ngum about 4.5 km upstream of its confluence with the tributary Nam Pha. NN3 is expected to be operational in January 2017 with an installed capacity of 440 MW. The dam will be 220 m high, with a catchment of 3,769 km^2 and reservoir storage capacity of 1,407 million m^3 at full supply level. A 99 km long 500 kV power transmission line from the NN3 power station to Ban Nabong substation will be built for exporting the produced electricity to Thailand.



The project will impact seven villages downstream (2,455 people/397 households (HH)), 17 upstream (10,312 people/1,645 HH) and five peri-reservoir (2,321 people/420 HH) villages. The 17 upstream villages are located downstream of two other hydropower projects of which one is under construction and one still in the planning phase. The project will require the resettlement of the 120 households living at Ban Xiengdet (upstream), 40 potentially impacted households along the public road from Nam Ngone to Long Cheng, and approximately five households that will be physically displaced due to the construction of the transmission line. Project impacts range from inundation of houses to the loss of agriculture production and/or loss of fisheries. Preconstruction activities were underway at the time of USAID's site visit in 2008.

Financing

On November 3, 2011, the ADB approved the following financing packages for the project:

- A sovereign loan in the amount of $115.4 million to finance the equity investment of Lao Holding State Enterprises in the Project Company (NN3PC).
- A non-sovereign loan, without government guarantee, consisting of two components: (i) "A" Loan, in the amount of up to $200 million, [representing ADB's direct exposure to the Project]; and (ii) "B" Loan, in the amount of up to $200 million, backed by risk participation arrangements with commercial banks.

The other components of the project are proposed for ADB board consideration in the first quarter of 2012 as follows:

- Sovereign loan to finance Electricite' du Laos' capital investment for (i) expansion of the Nabong substation, and (ii) 500 kV Udon Thani transmission line. While the total ADB assistance for these two components is still to be determined, it is expected to be in the range of about 120-150 million USD.

In addition, the IFC is considering providing an "A Loan" of up to $75 million for construction of the project. The IFC is also in discussions with other financiers to take up to $20 million of that amount as a "B Loan."

USAID Review

USAID has reported on this project in previous MDB Reports (April 2008, April 2011, and October 2011). The April 2011 and October 2011 reports outline USAID's technical review based on the EIA and Environmental Management Plan received in January 2011. In summary, the following elements of the EIA are inadequate: the lack of a "no action (project)" scenario in the alternatives analysis; absence of EIAs for transmission lines; absence of biodiversity data; and the quality of limited information available on species are questionable. The review also highlighted areas where the project does not meet ADB safeguard requirements such as considering the "no project" alternative or the ability to assess the significance of project impacts due to inadequate biodiversity baseline data.

Current Status

The $530,000 advisory Technical Assistance (TA) that was approved on November 3, 2011 for strengthening biodiversity management and protection in the project area was expected to commence in November 2011 and finish in December 2012. The objective of the TA is to mitigate the adverse biodiversity impacts of the project through establishment of an effective biodiversity protection and offset program. The TA is expected to integrate biodiversity conservation issues in the design and implementation of NN3. The first phase of this TA is now expected to commence in February 2012 and be completed in May 2012 prior to main construction activities. The results of the initial survey are anticipated in June/July 2012 to inform project developers of the presence of critical habitats and proposed mitigation measures. The second phase of the biodiversity survey is scheduled to start in October 2012 and continue into 2013. Phase 2 surveys are intended to reconfirm the findings and biodiversity

values identified in Phase 1, in addition to carrying out consultations with Government of Laos and host communities concerning conservation areas identified.

The members of the Dam Safety Panel have been selected. The first visit is expected in either late February or March. The specific dates will be finalized once the construction contracts have been negotiated and finalized.

IFC's Board of Executive Directors' date for proposed project financing is expected during either the first or second quarter of 2012.

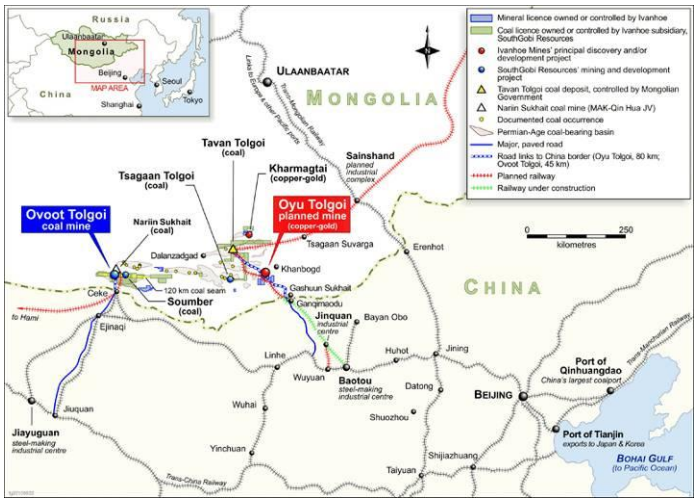
Mongolia

⬟ *Oyu Tolgoi Copper-Gold Mine*

Project Description

The Oyu Tolgoi (OT) Copper-Gold mine is projected to be the fourth largest copper-gold-silver producer in the world once production is started. Oyu Tolgoi LLC, Mongolia's largest copper and gold mining company, will build and operate the mine. Oyu Tolgoi is a strategic partnership between the Government of Mongolia (34 percent stake) and Ivanhoe Mines Ltd/Rio Tinto (66 percent stake). In January 2012, Rio Tinto acquired a majority stake in Ivanhoe Mines Ltd (Canadian), having purchased shares that take its interest to 51 percent.

The mine is located in the Umnugobi Aimag ("South Gobi province") in Mongolia's central region. The site is approximately 550 km south of the national capital of Ulaanbaatar. The deposit ore field of Oyu Tolgoi includes mines such as Hugo Dammet, South Oyu, and Kheruga. The Hugo Dammet deposit stretches to South Oyu and North Hugo and contains high levels of copper resources. The South Oyu deposit is contained within West South Oyu, the central zone, and Central Oyu.



The mine is being developed in two phases; full scale construction started in April 2010.

- Phase one is an open-pit mine, with initial production in mid-2012 and commercial production planned to begin in the first half of 2013. This type of mine has been selected with the aim of making the mine operational in the shortest period of time.
- Phase two of the mine development is an underground mine that will be ready to begin production in 2014. Oyu Tolgoi is expected to reach full production capacity by 2018.
- Between 2010 and 2013, an estimated 5.6 trillion tugriks ($4 billion) will be spent to build: the open-pit mine; a power plant; an ore processing plant (concentrator); site infrastructure; accommodation; and underground lateral development.

Annual output in each of the first 10 years is projected to average 1.2 billion pounds of copper, 650,000 ounces of gold and 3 million ounces of silver. In the next 65 years during Oyu Tolgoi (OT) exploration, the company is projected to extract 2,801 million tons of soil from the open pit and 2,170 tons of soil from underground.

Overall construction was over 54 percent complete by the end of September 2011 with a target of 75 percent completion by the end of 2011. It is reported that the installation of the towers for the 82 km long, 220 kV transmission line to the Mongolia-China border is complete. Ongoing exploration has identified new deposits and is extending the mineralized system which will extend the scope of extraction to over 14.3 miles from the OT site.

Financing

The OT project financing package is targeting up to $4 billion. On May 21, 2010, Ivanhoe Mines signed a joint mandate letter with the European Bank for Reconstruction and Development (EBRD) and the IFC for consideration of a financing package for the construction of the planned Oyu Tolgoi mining complex. Under terms of the joint mandate letter, EBRD and IFC will consider providing a two-part package consisting of:

- up to 300 million USD each from EBRD and IFC, as part of a group of primary lenders, in limited-recourse project financing under an "A loan" structure; and
- mobilization of a further $1.2 billion from commercial lenders under a "B loan" structure.

The US Export-Import Bank and the Multilateral Investment Guarantee Agency (MIGA) have also joined the lender group and commenced their due diligence process.

USAID Review

USAID reported on this project in the October 2011 MDB Report to Congress which also includes USAID's Trip Report. Key issues raised include: sustainability of water resource use; impact on other successful economic sectors; land use changes; and impacts on indigenous nomadic livelihoods and biodiversity. Final technical review is waiting on release of the final environmental and social impact assessment and related documents.

Current Status

As of March 19, 2012, the final Environmental and Social Impact Assessment and related documents had not been released and preliminary Board dates are not known. However, the project sponsor has indicated that they would like to have the financing package completed before mid-2012.

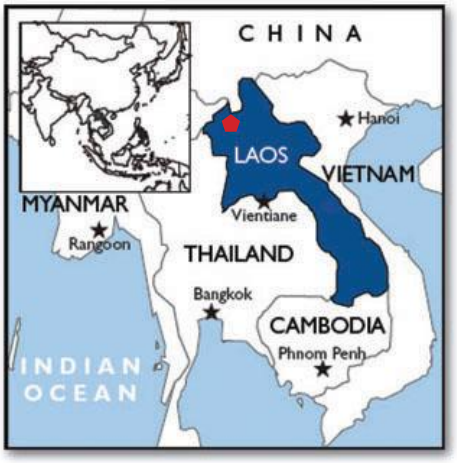
Section 2
MDB Post-finance Monitoring Projects

MDB-financed projects previously reviewed by USAID that have potentially significant environmental and social impacts, as well as projects discussed during Tuesday Group, are included in this section. It should be noted that in this stage of project development, the USG has no formal leverage; in many cases, the MDB involved in the financing lacks leverage, as well, if the loan has already been disbursed and paid back.

Laos

- *National Road 3*

Project Description



The Greater Mekong Subregion (GMS) countries (Thailand, Cambodia, Laos, Vietnam) have adopted a strategy to enhance trade connectivity and improve competitiveness. Towards that goal, countries are focused on nine priority sectors (e.g., transportation and telecommunication) and three priority geographical areas. The GMS North South Economic Corridor (NSEC) is one of the three priority geographical areas. The NSEC encompasses the area along the main north-south transport routes that link the economic hubs in the central and northern areas of the GMS subregion extending from Kunming, China to Bangkok, Thailand.

The Laos portion of the NSEC – National Route 3 is an approximately 230 km stretch from Huai Xai in Bokeo Province through 35 km of the Nam Ha National Protected Area (NPA) to Boten in Luang Namtha Province. It was reported that Laos was initially reluctant to build the road because of the high cost of construction due to its mountainous terrain, combined with limited benefits to Laos. At that time, some stakeholders viewed the road as more beneficial to China and Thailand, with Laos serving as a transit corridor. The various sections of the Lao PDR's National Route 3 (R3) were financed through Thai, Chinese, and ADB loans. Construction on the road was started in 2004 and completed in early 2008. The ADB financed a 75 km section of the road, of which 35 km runs through the Nam Ha NPA. Although the ADB loan was closed in June 2009, the ADB has stated that their institution remains committed to the safe operation of the road and as such, they are in discussions with the relevant stakeholders in the government and donor community.

USAID Review

USAID conducted a site visit to R3, located in the GMS North-South Economic Corridor, in December 2011. The site visit was carried out as part of USAID's responsibilities under the International Financial Institutions Act, Title XIII, Section 1303(a)(3), which requires USAID to

review multilateral development bank (MDB) projects with potential adverse environmental and social impacts.

In brief, R3 has brought a number of positive developments to the surrounding areas. All villagers spoken to during the site visit highlighted that as a consequence of the road they now have access to: electricity, public transportation, water (through ADB's water catchment project), schools, and enhanced access to markets and goods from China and Thailand.

R3 has also brought a number of negative impacts to the more than two dozen villages adjacent to the highway, including noise and air pollution from day and night truck traffic and safety issues due to the speeds traveled by the vehicles. Additionally, R3 cuts through 35 km of the Nam Ha NPA, isolating two of its three primary core biodiversity areas and allowing greater access into the protected area.

Detailed findings and recommendations of the site visit are provided in the Trip Report included in the Annex.

Section 3
Streamlined Procedure Projects

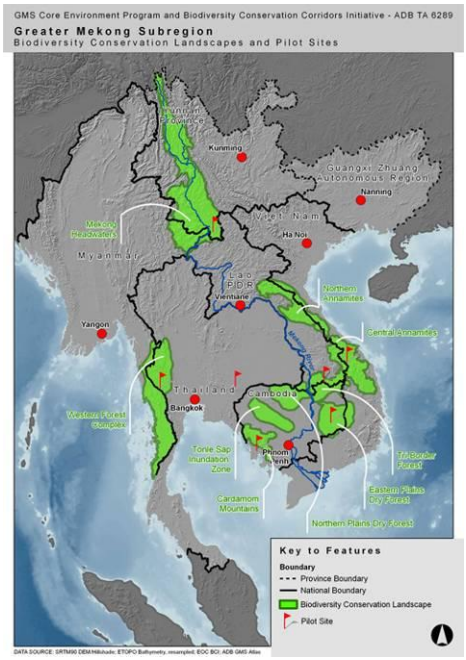
Under this procedure, projects are placed on the agenda of the Board of Directors. A project is considered approved without prior discussion, unless an Executive Director requests that it be discussed.

Cambodia, Laos, Vietnam

Biodiversity Conservation Corridors Initiative, Phase 2

Project Description

The Biodiversity Conservation Corridors Initiative (BCI) is part of an ADB regional assistance program intended to address the probable impacts on the environment resulting from economic development in the Greater Mekong Subregion (GMS). Biodiversity Conservation Corridors overlap with the proposed economic corridors in Cambodia, China, Laos, Thailand, and Vietnam. The BCI was initially funded at $400,000, approved by the ADB Board in December 2004, and officially launched in April 2006. The long-term goal of the BCI is that, by 2015, GMS countries will have established priority biodiversity conservation landscapes and corridors for maintaining the quality of ecosystems and sustainable use of natural resources while improving livelihoods.



In December 2010, the ADB Board approved a $69 million proposal for the GMS Biodiversity Conservation Corridors Project (BCC) via a loan to Vietnam and grants to Cambodia and Laos. The grants to Cambodia and Laos are $19 million and $20 million, respectively. Vietnam will receive a loan of $30 million. This project supports the upscaling of the BCC component and aims to improve sustainable management of biodiversity conservation corridors in these countries while ensuring sustainable livelihoods for local communities. The project is proposed to further enhance transboundary cooperation for preventing and mitigating fragmentation of biodiversity-rich forest landscapes of the Cardamom Mountains and Eastern Plains Dry Forest in Cambodia, Triborder Forest areas in southern Laos, and the Central Annamites in Vietnam.

In December 2011, the ADB Board approved a complementary proposal for a second phase of TA for the Core Environment Program and Biodiversity Conservation Corridors Initiative (BCI) in the GMS. This regional TA is designed to support GMS countries to integrate sound environmental management, biodiversity conservation, and climate resilience measures in the GMS Economic Cooperation Program. It aims to improve the sustainability of investments in the GMS while ensuring sustainable use of ecosystems and their services.

Financing

The total cost of the TA is estimated at $14.8 million, of which ADB will finance $800,000, on a grant basis with co-financing from the Government of Finland, and ADB will administer $14 million. The GMS governments will provide in-kind contributions in the form of staff assigned to supervise, implement, coordinate, and monitor TA activities and office space for national support units.

USAID Review

USAID continues to be concerned that there is a gap between what is being proposed in ADB's suite of proposals, in addition to the recent Global Environment Facility (GEF) proposal – GMS Forests and Biodiversity Programs – and what is happening on the ground, resulting in the financial investment being undermined by other GMS economic corridor activities. USAID has reported on these proposals in earlier MDB Reports to Congress (October 2008, April 2011, and October 2011) and conducted a site visit to several BCC sites in 2011. Given the amount of financing that is going towards biodiversity conservation (particularly in comparison to the amount that is going into the development of the GMS economic corridors), and given the mounting threats to ecological integrity in the region, it is critical to ensure that these programs are successful and achieve their objective in mitigating the environmental impacts of the development in the GMS economic corridors.

Overarching concerns with this suite of proposals and the ultimate success of BCC/BCI programs include the following:

1. Protected area management

The purpose of the biodiversity corridors is the maintenance of ecological connectivity and in particular, to facilitate the movement of wildlife from one intact area to another via the corridor. Therefore, the success of ADB's biodiversity conservation corridors initiative is intimately linked with the successful protection of protected areas and other biologically significant areas that act as ecological refugia and further the ability of protected areas to maintain core populations of wildlife. With a few limited exceptions (e.g., Nam Theun Hydropower Project), to date, there has been limited investment in the protected area systems that the BCC/BCI programs are designed to connect.

2. Illegal trade in wildlife and timber

The success of the BCI/BCC and its ability to mitigate environmental impacts from development of economic corridors is also dependent on the ability of countries to control illegal trade in wildlife/timber; both of which are exacerbated by increased transportation connectivity and access to formerly inaccessible natural areas. The effective management of protected areas (discussed above) also includes an effective anti-poaching and anti-logging component within the protected areas through effective enforcement and prevention of poaching and illegal trade that goes beyond protected area work. In this vein, a second

component involves the fact that the GMS economic corridor transit routes are linked with illicit trafficking, including wildlife and timber.[3]

3. Mitigation of the environmental impacts resulting from development in economic corridors
Based on the USG site visit (2011), roads are being developed within the corridors and through protected areas, key corridors and other biologically sensitive zones, without full appreciation or understanding of the direct, indirect, and cumulative impacts of these activities on ADB's biodiversity corridors; and without the strategic and integrated planning that is needed in order to sustainably develop the GMS. The ecosystem goods and services that are so important to the very development of this region are threatened.

4. Budget
Based on the budget that will be made available to the regional program to address issues the USG has raised, it is unclear how this level of financing is expected to achieve the mitigation measures for environmental impacts of the GMS economic corridors, and to produce sustainable biodiversity conservation results.

Current Status

The USG is continuing to engage with ADB management to achieve a better understanding of how ADB's proposals are mitigating the impacts of the GMS Economic Corridors.

[3] In correspondence from ADB on March 14, 2012, they have stated they are planning to collaborate with ASEAN-WEN and PATROL in improving effectiveness in addressing the illegal trade in wildlife and timber.

Indonesia

Regional Roads Development Project

Project Description

The Indonesia Regional Roads Development Project is designed to improve strategic and national road corridors in northern Kalimantan and southern Java to support economic growth in these two less developed and poorer areas of the country. The rehabilitation and capacity expansion of road corridors is expected to strengthen national and regional connectivity, and improve access to markets, job opportunities, and social services.

The national road network in southern Java is incomplete, with some road sections of the southern Trans Java Highway not yet constructed, resulting in gaps in network coverage; other sections are constructed below national standards and are in poor condition. Improved road infrastructure in southern Java is necessary to remove existing constraints to economic growth and investment in this isolated area. Similarly, road network improvements are needed to support economic development in less-developed and remote districts in northern Kalimantan. Improved road connections in Kalimantan to the Malaysian border will support the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) transport initiatives to develop two land-based transport corridors for greater connectivity and reduced transport costs, as well as complement other BIMP-EAGA programs to reduce nonphysical barriers to trade by improving customs, immigration, quarantine, and security.

There are three civil road works contracts in West Kalimantan, and four in East Kalimantan. The project was not considered as a Category A since the road sections that are being rehabilitated only involve putting asphalt on existing dirt roads and land acquisition and resettlement impacts were deemed not to be significant. Since the project was not a Category A, only an Initial Environmental Examination was undertaken. Based on this level of review, six of the projects in Kalimantan will pass through forests that are protected or used for production, but no tree cutting and land acquisition in such forests will be needed. No rare, threatened, or endangered species of flora and fauna were determined to be in or close to the subproject areas. No heritage sites of national and international importance, or sites that are

historically or archaeologically sensitive, are in or near the subproject areas. Ethnic groups, such as Melayu, Chinese, and Dayak, live along the roads in West Kalimantan. Project documents indicate that consultations were conducted from September 2008 to August 2011 involving about 275 people, including affected people, community leaders, nongovernment organizations, and national and provincial government officials.

National and local NGOs raised a number of issues on this project both in writing and verbally. The issues include insufficient or missing: (1) consultation; (2) information in design of the project regarding impacts on the forests; (3) information about existing Indigenous Peoples (IP) communities living inside and surrounding project areas; (4) information about the social, economic, and cultural status of women; (5) documents in Bahasa Indonesia for IP and non-IP affected communities; (6) information disclosure particularly to the affected communities; (7) data in Regional Roads Development Project's Resettlement Plan; and (8) response from the project officers.

Financing

The total cost of the project is $80 million which was financed as a loan to the Republic of Indonesia from ADB's ordinary capital resources.

USAID Review

USAID reported on an earlier version of this proposal in April 2008 which included the Northern Trans-Kalimantan Highway (NTKH) and raised a number of environmental and social concerns. Although this latest proposal does not include the NTKH, USAID's review has raised the following issues with the Initial Environmental Examination of the Kalimantan portion of the project:

1) Appropriateness of project categorization based on the following issues:
    a. Indirect and cumulative impacts, which can be as great as direct impacts, have not been assessed and analyzed.
    b. Indirect and cumulative impacts need to be assessed particularly in border areas and areas where the road transits through protection and production forest.
    c. There is no data to support the conclusion that "no rare, threatened or endangered species of flora and fauna are in or close to the subproject areas."
    d. Increased likelihood of illegal logging and wildlife trade.
2) The increased risks of trade in illegal timber and wildlife both within Indonesia and crossborder movement into Malaysia were not analyzed:
    a. A discussion on transboundary impacts, illegal trade, and border controls is needed.
    b. Once these risks have been appropriately assessed and analyzed the Bank will need to provide assurances that it will revise the project to mitigate those risks and provide appropriate assistance for capacity development in areas where it is lacking.

Additionally, based on discussions with NGO representatives, USAID is concerned that: 1) the consultations followed the “socialization"-style disclosure practices with rural community stakeholders, rather than participatory decision-making; 2) the relevant authorities have demonstrated a questionable consideration of indigenous populations (or "Isolated Vulnerable People"); and 3) the project will pose risks to the health, safety, and property of such communities by an anticipated influx of construction workers.

Current Status

The project was approved without Board discussion on November 24, 2011.

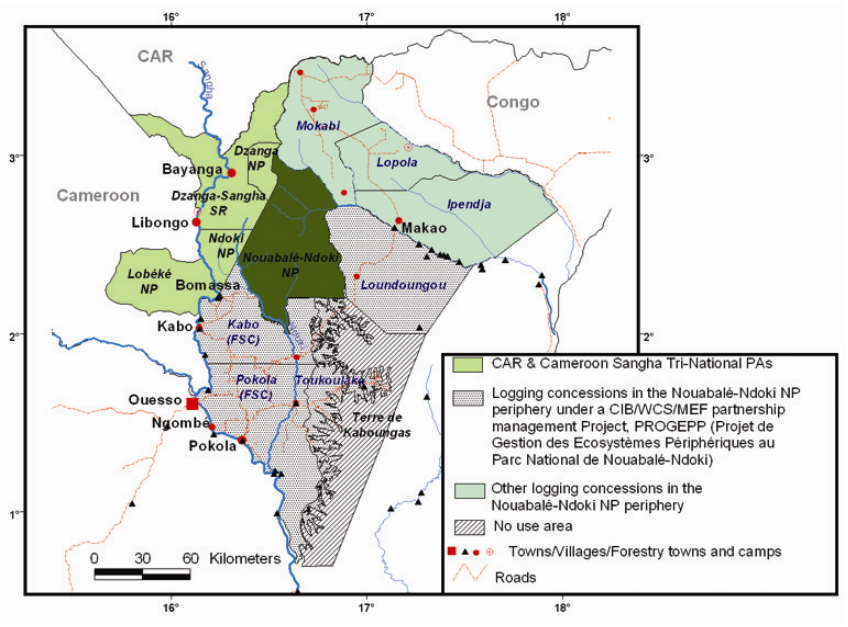
Representatives from one of the international NGOs engaged with national and local NGOs recently met with ADB’s safeguard team and project management team (January 2012) to discuss the implementation of the safeguards in relation to this project and the issues they raised prior to Board approval. It was reported that the discussion focused primarily on meaningful consultations, document translations into Bahasa Indonesia for project affected communities, and the definition of indigenous people. Based on ADB’s responses, NGO representatives continue to remain concerned that the safeguards are not being effectively implemented.

Section 4
MDB Watch List

USAID continues to monitor the status of the following projects included in previous MDB Reports. Updated information is provided when available.

Multinational: Study on the Ouesso-Bangui-N'djamena Road and Inland Navigation on the Congo, Oubangui, and Sangha Rivers

The AfDB approved a technical assistance (TA) grant (approximately $11.8 million) to Chad, the Democratic Republic of the Congo (DRC) and the Republic of Congo on December 1, 2010, to support a study of how to increase regional transport networks. The grant will fund the technical, environmental and economic feasibility of developing the Ouesso-Bangui-N'Djamena road and waterways on the Congo, Oubangui, and Sangha Rivers, in order to facilitate transport along the Kinshasa/Brazzaville-Bangui-N'Djamena corridors. The countries are considering both a road and waterway transport network in this region given the density of forests and waterbodies. The study's objective is to determine the optimal paths and then determine what component should be funded through a future AfDB operation. The study will run through 2013 and will look at developing sections of the Ouesso-Bangui and Bassangoa Mbaïkoro road, as well as how to improve the navigation on the Congo-Oubangui-Sangha Rivers. Procurement of contracts will follow AfDB rules.



USAID concerns have been raised in earlier MDB Reports to Congress (October 2011, April 2011). Briefly, these concerns include the following:

- Infrastructure development and regional integration need to be balanced with consideration of adverse impacts that infrastructure development has on highly sensitive tropical forests.
- These potential transport solutions are near or pass through some very sensitive biodiversity areas. The Sangha Tri-National Park area, which consists of protected transboundary areas in the Central African Republic, Congo-Brazzaville, and Cameroon,

would be adversely affected if there is a major increase in boat and commercial shipping traffic on the Sangha River.

- Concern about the Bank's rationale for not considering rail lines, particularly when the lines are connecting the places proposed by the road network.
- Concern about the possible increase of illegal logging and/or poaching that could accompany the opening of further access into the area. The Bank needs to commit to identifying mitigation strategies that can be effective in Central Africa and for this project. Experience to date has shown that infrastructure projects have resulted in widespread illegal logging, rampant poaching, wildlife trafficking and other negative environmental and social impacts due to either inadequate mitigation measures or measures not properly operationalized or practical.
- For community participation to be effective, process is not enough; the indigenous, semi-nomadic forest communities that will be impacted must have knowledge and understanding of the project's impacts in order to be able to effectively engage in the study.
- In addition to analyzing the environmental impacts, the study needs to also address the social impacts on local communities. This would include not only socio-economic, but also health and cultural impacts with recommendations for impact avoidance and/or mitigation measures.

USAID undertook a site visit to the Republic of Congo in October 2011 to meet with stakeholders and visit the proposed area of the road and Sangha River project. The Trip Report is included in the Annex of this report. Recommendations based on the trip are below:

- The project will need to ensure a robust environmental and social impact assessment in order for decision-makers to have all the relevant information prior to a final decision. This will include the following:
    - A thorough, unbiased, and transparent alternatives analysis designed to ensure that environmental and social considerations are taken into account during the decision-making process. Ideally, the analyses of alternatives should look beyond location or design issues to consider alternate means of achieving the development objectives of the project. The alternatives analysis needs to include a "no action" alternative. This analysis provides a benchmark, enabling decision-makers to compare the magnitude of environmental and social effects of the action alternatives. Additionally, the alternatives should consider not only road but also should include rail. In the absence of such considerations, the EIA tends to be directed to supporting or affirming a project proposal.

      Given the interest of the cities alongside the Oubangui River to be linked by a road system and within easy reach of Bangui (CAR), another alternative should consider building the road from Ouesso to Impfondo. The study should investigate the feasibility and cost of this option relative to other potential routes. Ideally, the study would also take into account the economic potential of these cities.
    - The process of analyzing cumulative effects can be thought of as enhancing the traditional components of an environmental impact assessment: (1) scoping, (2)

describing the affected environment, and (3) determining the environmental consequences. Generally, it is also critical to incorporate cumulative effects analysis into the development of alternatives for the EIA. Only by re-evaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects is also essential to developing appropriate mitigation and monitoring its effectiveness.

    - Appropriate baseline data, gathered over a sufficient period of time, including seasonal variation, is required to assess the scope of impacts and to identify prevention and/or mitigation measures.

- The impacts of the current roads – Ndoki 1 and Ndoki 2 – should be assessed in order to get a good understanding of the broader ecosystem impacts on wildlife, vegetation, and increased human access to the area where the impacts are currently occurring. Due to the construction of the road, and impacts of logging, elephants are now concentrating along the big flooded forest area (Ndoki River in the CIB logging concession) and thus with increasing human access the elephants are more vulnerable to poaching. Due to obstructions, the change in water flow quantity and, possibly quality, is impacting vegetation.
- The study needs to take into account: 1) that these forests represent some of the last remaining stands of High Conservation Value forests (HCV), 2) the area is currently in the process of World Heritage Site designation, and 3) the presence of globally threatened and endangered species. These points are particularly pertinent given the rapid decline of HCV forests in the Congo Basin. In fact, although not yet officially classified, personal communication with forest elephant experts indicates that the forest elephant should be reclassified from endangered to critically endangered. This area also has the last intact populations of western lowland gorillas and chimpanzees.
- Experience to date has shown that infrastructure projects have resulted in wide-spread illegal logging, rampant poaching, and other negative environmental and social impacts due to either inadequate mitigation measures or measures not properly operationalized or practical. The study needs to include a component that identifies mitigation strategies that can be effective in Central Africa to address social and environmental impacts.
- The study will need to look at the dynamics that are happening with the logging companies in the area to understand how they are or not effectively dealing with bushmeat consumption given the large price difference between domestic meat and bushmeat.
- The study should determine the number of anti-poaching patrols required and implemented prior to initiation of construction. Baseline data from anti-poaching patrols should be established prior to construction to be able to determine the impact of construction workers and the road.
- Participatory land use mapping needs to be undertaken so the forest areas and usage zones can be mapped. However, this needs to involve more than one or two members (the group should include women, different ages, etc.) and chosen by the population in a full community meeting, where the purpose of the exercise is discussed. The use of a GPS using iconic software developed for hunter-gathers' use and corresponds with the local populations' use of the forest is preferable.

- Experts on indigenous communities, specifically the Mbendjele people, should be engaged in the study. An independent expert with long-term experience with these populations and an understanding of the particular difficulties in achieving effective participation of these peoples is needed to lay the foundation for better informed project consultations, due to their societal structure, the cultural/spiritual properties of the forest, and many other factors.
- The study should examine the Government of the Republic of Congo (GRoC) capacity and technical needs in order to effectively mitigate impacts associated with the proposed project.
- The study should look closely at transboundary immigration issues associated with transport infrastructure – DRC refugees, CAR, and Cameroon.
- The study should look closely at the impacts of transport infrastructure and potential illicit trafficking in the region (including human trafficking and drug trafficking).

Laos – Nam Ngiep 1 Hydropower Project

The project involves the construction and operation of a 289 MW hydropower facility on the Nam Ngiep River under a build-operate-transfer (BOT) arrangement. The power generated from the facility will be exported into Thailand. This project is considered a Category A.

ADB is considering financing of the Nam Ngiep 1 Hydropower Project with a direct loan of $76 million and a B loan of $122 million. The Board date is estimated for May 2012.[4]

Laos – Nabong 500 kV Substation and Transmission Facility Project

This ADB proposed project for financing is considered the first step in the Lao government's plan to gradually establish a national extra-high voltage transmission network. This network is envisaged as the backbone for integration of the country's future national transmission and distribution system to help serve domestic needs as well as integration into the regional power system. It will also enable the private sector to develop hydropower projects in Laos by providing open access for them to evacuate the generated electricity to demand centers as well as for power exports to neighboring countries.

ADB has stated that support for this project will ensure that power generated by the Nam Ngum 3 Hydropower Project (NN3) (and later on Nam Ngiep 1 Hydropower Project – NNP1) will reach their intended market (Electricity Generating Authority of Thailand, EGAT). By supporting this project, ADB expects to further enhance the public-private participation in the entire NN3, NNP1 and Nabong complex. This project is considered as a Category B with the Board date estimated for April 2012.

[4] As of March 19, 2012, it is expected that the Board date will be later than May 2012.

Mozambique – Regional Transmission Project

WB proposed financing to contribute to the investment and technical assistance focused on the development of the first stage of the North-South Transmission backbone line required for the first Tete Generation project(s).

An earlier proposed Board date of May 2011 has been pushed back to an undetermined date in 2012.

Nepal – Upper Seti (Tanahu) Hydropower Project

In 2010, the ADB Board of Directors approved a Technical Assistance grant to Nepal for a detailed engineering study for the Upper Seti Hydropower Project. The Study is to provide consulting services for each of two major engineering design specifications: (i) civil works on geological risk assessments, and (ii) facilities on technical and hydrological risk assessments. It is estimated to cost $2.95 million, including consulting services, administrative costs, and contingencies.

As of January 2012, the project's preparatory technical assistance and another project preparatory facility for detailed engineering studies are being implemented. Last year, the project was officially renamed to "Tanahu" hydropower.

Section 5
MDB Policies, Guidelines, Strategies, and Action Plans

In addition to reviewing MDB projects, USAID takes part in the Treasury-led interagency process of reviewing MDB policies, guidelines, strategies, and action plans. Since these documents ultimately provide the framework for MDB-supported projects, it is important that they contain adequate provisions to guarantee environmentally and socially sound projects.

African Development Bank – Environmental and Social Safeguard Policies

The African Development Bank is in the early stages of revising its environmental and social safeguard policies. A draft version of the revised safeguards was provided to the AfDB Board in late 2011. A revised draft was publicly disclosed in March 2012 and consultations will take place in 2012.

USAID's review of the draft version raised similar technical concerns to those raised during the review of IFC Performance Standards and Asian Development Bank safeguards. Examples of USAID's technical concerns are provided below for two of the Operational Safeguards:

OS 1. Operational Safeguard on Environment and Social Assessment

- Alternatives analysis – Consideration of reasonable alternatives provides the opportunity to consider other ways to achieve the desired outcome and often provides valuable insights into ways to improve the proposal. Alternatives analysis needs to look beyond location or design issues to consider alternative means of achieving the development objectives of the project; inclusion of a substantive analysis of "no-project" scenario which provides a baseline that enables decision-makers to compare the magnitude of environmental effects of the action alternatives; and the need to ensure that alternative analysis looks at environmental and social, as well as technical and economic, aspects of the various scenarios. In the absence of such considerations, the EIA tends to be directed towards supporting or affirming a stated project proposal.
- Associated facilities definition – Associated facilities is a term of art that is used to describe facilities that, while not financed by the MDBs are connected to a MDB-financed project. Environmental and social impacts of an associated facility can be at least as serious as, or greater than those from the MDB-financed component (e.g., a coal mine would be expanded to supply a new MDB-financed power plant). The scope of analysis for associated facilities needs to include an assessment of direct, indirect, and cumulative impacts. At present, AfDB's proposed definition and its application is too narrow to capture an adequate assessment of associated facilities for decision makers.
- Cumulative impact definition – The scope of cumulative impacts needs to include any existing projects or reasonably foreseeable future projects—whether MDB-financed or not—which, because of their temporal, spatial, or geographic boundaries, can impact the same resources that the proposed project could impact. Cumulative impacts must be evaluated along with the direct and indirect effects of each alternative. At present, AfDB's proposed definition and application is too narrow to fully capture cumulative

impacts.

- Baseline data – There is no guidance on the adequacy of baseline data collection that is to be collected in order to have enough information to be able to assess impacts meaningfully.
- At a minimum, for Category 1 projects, vulnerable groups and indigenous populations should be provided with independent technical and legal support throughout the process to ensure adequate project participation.

OS 3. Operational Safeguard on Biodiversity and Ecosystem Services

- The impact assessment process is narrowly defined and there needs to be inclusion of cumulative impacts and associated facilities impacts.
- The assessment of biodiversity and ecosystem values should be conducted by internationally-recognized independent experts and not project sponsor contractors.
- AfDB-financed activities are allowed in critical habitats and allow for biodiversity offsets. Biodiversity offsets cannot qualify as mitigation measures for impacts and are not supported by conservation science as feasible or viable. Critical habitats are so named precisely because they are irreplaceable and one cannot offset the loss of a unique habitat. Due to these issues, AfDB should not finance activities in critical habitats.
- Mitigation measures for projects developed in natural habitats are to be designed and implemented to achieve either net benefit to or no net loss of biodiversity (if feasible). Both of these outcomes are unattainable given the timeframe and type of data that is collected for AfDB projects, and because of data availability, given the complexity of ecological systems and processes.
- Management of ecosystem processes is narrowly construed to identifying "priority ecosystem services."

World Bank – Environmental and Social Safeguard Policies

The World Bank has initiated a two-year process of updating and consolidating its environmental and social safeguard policies into an integrated environmental and social policy framework. The process informing the review and update is intended to be transparent, inclusive, and consultative and will engage Bank shareholders as well as a diverse group of internal and external stakeholders.

The Bank is preparing an "Approach Paper" to provide an overview of the scope and objectives of the updating and consolidation process, as well as a preliminary schedule of those steps and the planned consultations.

The scope of the WB review will cover the Bank's environmental and social safeguard policies and its approach to the use of country systems for environmental and social safeguard policies. This includes the following environmental and social safeguard policies that are used for investment lending (OP/BP 4.01 on environmental assessment, OP/BP 4.04 on natural habitats, OP/BP 4.09 on pest management, OP/BP 4.10 on Indigenous Peoples, OP/BP 4.11 on physical cultural resources, OP/BP 4.12 on involuntary resettlement, OP/BP 4.36 on forests, and OP/BP 4.37 on dam safety); and OP 4.00 on use of borrower country systems for environmental and social safeguards ("use of country systems").

Annex

Republic of Congo – The Ouesso-Bangui-N'djamena Road and Inland Navigation on the Congo, Oubangui and Sangha Rivers Trip Report (October 2011)

Laos – National Route 3 (December 2011)

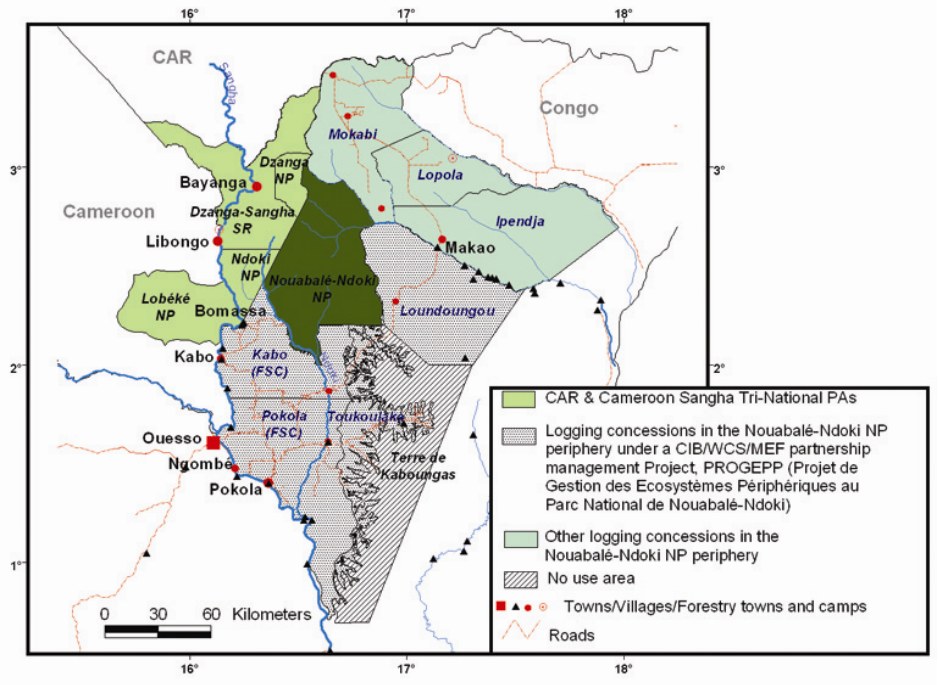
The Republic of Congo – Ouesso-Bangui-N'djamena Road and Inland Navigation on the Congo, Oubangui and Sangha Rivers Trip Report (October 2011)

Prepared by Leslie Johnston

USAID/Washington, EGAT/ESP

USAID/EGAT, Africa Bureau, USAID/DRC and Brazzaville Embassy staff conducted a site visit to the Republic of Congo (Congo) to gain a better understanding of the environmental and social aspects of developing the Ouesso-Bangui-N'djamena road and improving the navigation on the Sangha River. This site visit was carried out as part of USAID's efforts to engage upstream in multilateral development bank (MDB) projects as part of USAID's due diligence responsibilities under the International Financial Institutions Act, Title XIII, Section 1303(a)(3), which requires USAID to review MDB projects with potential adverse environmental and social impacts. The site visit was conducted October 17-28, 2011.

This report summarizes information obtained from the site visit, meetings with stakeholders (e.g., government, community members, and NGOs) in Brazzaville and in northern Congo where the road is proposed and documents available to the public. Sites visited included Ouesso and its surrounding areas, Nouabale-Ndoki National Park, and the current road from Quesso to Makao. The meetings focused primarily on the environmental and social aspects of the project. The report does not reflect the views of USAID nor of the United States Government (USG), and USAID has not substantiated all comments.



This report is divided into the following sections:

Section 1. Project Information
Section 2. Background Information
Section 3. Stakeholder Issues

Section 4. Recommendations

Section 1. Project Information

The AfDB approved a technical assistance grant (approximately $11.8 million) in December 2010 to fund the technical, environmental and economic feasibility study of developing the Ouesso-Bangui-N'djamena road and the Congo, Oubangui and Sangha waterways to facilitate regional transport networks. The ADF financing will fund the study in three countries (Congo, Central African Republic (CAR), and Democratic Republic of the Congo (DRC)), to which grants will be awarded for the purpose. The cost of the study in Chad stands at UA 0.2 million[5] and will be financed by the Regional Economic Communities (RECs) with community resources.

The feasibility study comprises two components (the study and management of the study). The study component is subdivided into two subcomponents: 1) the Ouesso-Bangui-N'Djamena Road Study and 2) the Congo-Oubangui-Sangha River Navigation Study. The road component is comprised of the following two sections: (i) the Ouesso-Bangui section in the equatorial forest to the South, which is about 600 km long and lies across ROC and the CAR; and (ii) the Bossembélé-Mbaïkoro section in the savannah woodland to the North, which is about 460 km long and lies in CAR and Chad territory. The overall objective of the study is to determine one or several viable construction plans for connecting Kinshasa, Brazzaville, Bangui and N'Djamena by road and/or inland waterways.

Apart from a few obstacles resulting generally from a lack of maintenance upstream of Ouesso, the Sangha River is navigable between Mossaka and Nola (710 km), thus granting access to the South-West region of CAR and the South-East region of Cameroon, especially for the evacuation of unbarked logs. The main ports along the Sangha River are Ouesso in Congo, and Nola and Salo in the CAR.

Various activities will be conducted under each of the two subcomponents (socio-economic and economic profitability studies; organization of seminars for community participation; environmental impact assessments; detailed technical studies) with production, validation, and submission of all the required documents.

The feasibility study has not yet started and at the time of the USG visit, the Government of the Republic of Congo (GRoC) was developing the various committees for project implementation. Grand Trauvax is the project manager for GRoC and various ministries

[5] AfDB Unit of Account.

(transportation, public works, environment) and will be engaged to provide input. Rail is not being considered for this part of the project since it is not considered as economically viable as compared to the road. It was reported that earlier rail lines in Congo have been shut down because their operations were not economically viable.

Section 2. Background Information

Central African countries within the Economic Community of Central African States (ECCAS) region are determined to create a stronger trade network within their region and other regional economic communities. These countries have adopted the "Consensual Transport Master Plan for Central Africa (PDCT-AC), with a priority of connecting the capitals of various States. The Kinshasa/Brazzaville-Bangui-N'Djamena highway is one such priority since it will connect the four capitals and give CAR and Chad access to the sea through either Pointe-Noire (Congo) or Matadi (DRC). Currently, access is through the Douala Port in Cameroon. At this point, the Ouesso-Bangui-N'Djamena section of the proposed highway is undeveloped.

Improving connectivity through inland navigation is also part of the PDCT-AC priority network – specifically the Congo River with its two tributaries, the Oubangui River and Sangha River. The current condition of the ports and waterways is not adequate due to a number of factors, including deterioration of infrastructure, obsolescence of equipment, and silting along the edges of the quay, resulting in a decline of boat traffic.

The Oubangui River (2,272 km) is the longest tributary of the Congo River on its right bank. From its source, up to 100 km after Bangui, it serves as the boundary between the CAR and the DRC, and then it forms the boundary between the DRC and ROC where it flows into the Liranga River, 600 km upstream of Brazzaville. The Bangui-Brazzaville connection through the Oubangui River is the "historic route" that facilitates access and transportation in Central Africa. Today, despite the navigation problems on this river, 95% of the CAR's imports (especially petroleum products from Kinshasa via the Matadi-Kinshasa pipeline) transit through it. Its main ports are Bangui in the CAR and Impfondo in the Republic of Congo.

A number of cities of moderate size lie alongside the Oubangui River, including (from south to north) Likouala's capital city of Impfondo, Dongou, and Betou. These cities have lobbied hard for a government policy of "desenclavement," with the goal of linking them by road to the rest of the country at large. This argument has gained some political traction and it appears road plans are likely at some point in the future, such as when Likouala is next in line among the provinces for development activities under the national "provincial accelerated development plan." Thus, any road not planned to pass through some of these cities, which have some paved roads already, may lead to additional road construction to link these cities to the road.

The Sangha River (790 km) is the second biggest tributary of the Congo River on its right bank. It flows North-South, from Nola in the South-Western part of CAR, passes through Ouesso and finally joins up with the Congo River at Mossaka, located 400 km upstream of Brazzaville. The Sangha River is the main watercourse running through the center of the protected Sangha Trinational Landscape and forms the border between countries.

Figure 1. Sangha River flowing through the Sangha Trinational Landscape.

Transboundary/National Protected Areas: The Sangha Trinational (TNS) Landscape is one of the most important conservation areas in Central Africa. This transboundary landscape encompasses three contiguous national parks totaling 754,300 hectares. These national parks are Lobéké National Park in Cameroon, Nouabalé-Ndoki National Park in Congo and Dzanga-Ndoki National Park in the Central African Republic. These national parks are embedded in a much larger forest landscape, referred to as the "TNS Landscape."
In 2000, the first ministerial meeting of the Central African Forests Commission (COMIFAC) took place. The ministers of Cameroon, the Central African Republic and the Republic of Congo signed a cooperation agreement to establish the TNS. This agreement documented the vision to coordinate conservation, management, and research efforts in the three national parks, and also refers to sustainable development, tourism and anti-poaching efforts.

Figure 2. Western Lowland Gorillas in Djeke Ecotourism Project, Nouabalé-Ndoki National Park.

The TNS comprises large tracts of ecologically and functionally intact tropical lowland forests, 70% of which have never been logged, and where the habitat has not changed ~~since~~ in about 1,000 years. It is the only intact, almost unhunted tract of forest within the "Western Congo Basin Moist Forest" eco-region apart from the Dja Reserve in Cameroon, and is a much better state of conservation than the Dja Reserve. A large number of threatened species, both fauna and flora, occur and are highly protected within this landscape, including Endangered forest elephants, Critically Endangered western lowland gorilla, the Endangered chimpanzee, and several antelope species, such as the sitatunga and the bongo. The TNS protects a large number of heavily exploited tree species which are Vulnerable (e.g.,

numerous Meliaceae), Critically Endangered (e.g., *Autranella congolensis*), and at Risk of Extinction (e.g., various species commercially traded as "ebony") that are being unsustainably exploited for timber in the Congo Basin.

Figure 3. Chimpanzee (group) in Nouabalé-Ndoki National Park.

As mentioned above, the Sangha River constitutes the major water course of the watershed and transverses the TNS from North to South. A largely undisturbed major tributary to the Congo River, the Sangha continues to host populations of the Nile Crocodile (*Crocodylus niloticus*), as well as the Goliath Tigerfish (*Hydrocynus goliath*), a large predator. Endemic species and subspecies have been identified in the Sangha River corridor, such as the Sangha Forest Robin (*Stiphrornis sanghensis*).

The TNS is proposed as an UNESCO World Heritage Site under the following two criteria:

> (ix) be outstanding examples representing significant ongoing ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals
>
> (x) contain the most important and significant natural habitats for *in-situ* conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Government capacity to control illegal logging and wildlife trade: The GRoC capacity for natural resource governance and enforcement is very weak. The Independent Monitoring of Forest Law Enforcement and Governance (IM-FLEG) is implemented by the Forests Monitor (FM), in collaboration with Resource Extraction Monitoring (REM). The program is designed to systematically document infractions in forest sector activities and analyze gaps in forest law enforcement.

In 2010, the GRoC signed with the European Commission a Forest Law Enforcement, Governance and Trade (FLEGT) Voluntary Partnership Agreement (VPA), which aims to fight against illegal logging by allowing only legally harvested timber to enter the European market. However, the date for entry into the EU market has been postponed at least once due to the lack of GRoC compliance with the 163 FLEG indicators. At the time of USAID's visit, it was reported that an office was not yet established and functioning that would have the ultimate authority for FLEG determination.

IM-FLEG is implemented through field missions each year to logging concessions, information obtained from the Ministry of Sustainable Development, Forest Economy and Environment on specific issues of governance and forest crime, analysis of administrative processes, and multi-

stakeholder meetings. These activities are undertaken with the goal to achieve better governance in the forestry sector and to support an effective implementation of policies for sustainable forest management. Reportedly, illegalities are so blatant that even tax evasion is easy to identify. The findings from each field investigation are presented to the 'reading committee,' which is comprised of ministries, civil society, and embassies. After debate, the report is published and made available to the public. Recommendations are provided to improve the efficiency of forest law enforcement and promote reform in the forest sector in the Congo Basin region.

Governance issues highlighted for both the public and private sector include:

- The low level of implementation of logging companies' obligations laid out in the cahier des charges to the detriment of socio-economic development of local populations.
- A conflict of interest, since some government authorities are paid for by logging companies.
- Lack of interest/ability/capacity of central and local government officials to enforce the law at the field level.
- Penalties and fines are not being paid by the private sector.
- There is no transparent process for the allocation of the concessions since the IM-FLEG process starts after the concession has been awarded.
- Lack of transparency in the Treasury/Forest Fund to make sure that the funds needed in the field are dispersed.
- Logs are going to Gabon and Cameroon, but since there are no border controls, it is difficult to determine quantity and species of logs going out.

There is no comparable enforcement oversight to IM-FLEG for wildlife crimes and as such, the wildlife sector is in much worse condition than the forestry sector. This is a concern since forest-dwelling communities rely heavily on wildlife for subsistence and trade. Additionally, people (including criminal elements/organized crime) outside of the region are engaging villagers to poach.

Indigenous Peoples: In the Republic of Congo the total population of indigenous semi-nomadic hunter-gatherers (e.g., Baaka, Mikaya, Mbendjele) is unknown. The Congo's northern forests, including the TNS landscape, are home to important groups of these semi-nomadic hunter-gatherers (e.g. Mbendjele). It is reported that in the mid-1990s, these groups outnumbered village-dwelling farmers and fishers in the Ndoki forest. To-date, these indigenous peoples have had very limited impacts on their environment and natural resources.

These indigenous peoples societies are characterized by anthropologists as egalitarian, 'immediate-return' societies. As such, they do not have a tradition of representatives with authority to make decisions on behalf of the community. Individuals with recognized skills/experience may be accepted as leaders in relevant situations, but in general there is no overall leader. Decisions are taken collectively. Being semi-nomadic they live in small communities dispersed throughout remote forest areas. They do not accumulate property or store surpluses and are strongly orientated toward the present rather than the future. Economic inequality within the group is leveled by obligatory sharing.

Inequitable social arrangements between the Bantu (majority) and the indigenous peoples manifest themselves as relationships of domination and exploitation and in many instances this amounts to involuntary servitude. The government of the Republic of Congo has stated that it does not tolerate this practice; however, the UN Special Rapporteur has reported hearing of ongoing domination of indigenous peoples by Bantu individuals. Because of their superior hunting skills, indigenous peoples are expected to hunt for their Bantu "master" as part of their work commitment. Because these people do not have the necessary weapons, they are borrowed from the Bantu and any wildlife captured is handed over to the Bantu "master." The hunter is usually given the less desirable animal parts as compensation. Violence is often associated with this relationship with reports of Bantu violence toward the indigenous people if they are unable to repay their debts. Because of their extreme poverty, indigenous peoples sometimes "borrow" food, clothes, or other material items which also leads to a form of debt servitude and results in lifetime commitment to their Bantu "master."

The Republic of Congo recently passed Law No. 5-2011 on the Promotion and Protection of the Rights of Indigenous Peoples ("Indigenous Peoples Law"). The law guarantees a wide range of economic, social and cultural rights specific to indigenous peoples in Congo. For example, guaranteeing discrimination-free access to education to the protection of the rights of indigenous peoples to lands and resources on the basis of traditional patterns of use and occupancy. The law provides for consultations regarding measures that affect indigenous lands or resources and that the consultations must be carried out in good faith, without pressure or threat, and with a view to obtaining the free, prior and informed consent of the concerned indigenous peoples.

There are at least two last primitive indigenous peoples' villages remaining undisturbed and relatively geographically isolated around Mbandza and around Manfouete. It is estimated that in the Mbandza area, there are ~300 people.

Discussion with a group of Indigenous Peoples in the area of the proposed road highlighted the following points:

- Life is much more difficult now since the forest is farther away. It is at least a one-day trip to and from the forest.
- Unlike the past, they do not hunt with nets anymore. Now they use guns, given to them by Bantu, and they give the game to the Bantu. Sometimes, the Bantu will give the hunter back the head of the animal killed, but usually it is alcohol. Neither cash nor food is provided.
- They do not have a good impression of outsiders and would prefer to stay alone and do small fishing and hunting.

- Some indigenous peoples work as guides for logging companies, some like it, others do not.
- They do see people from CAR and other places hunting in their forest.

Illegal immigration: There are a number of illegal immigrants from DRC moving to Impfondo and toward the interior of Congo. Approximately two years ago, ~250,000 DRC fishers were displaced due to fighting over fishing rights along the Congo River, which turned into massive riots culminating with at least 120,000 migrating to Congo. They are in Congo illegally, and subsequently are illegally fishing and hunting. Illegal migrants are also associated with poaching. The Impfondo area is now growing crops which indicate this area continues to be populated not just by Congolese, but also illegal immigrants from DRC since it is reported that Congolese would just go into the forest for food. During the site visit on the road to Makao, there were several people who appeared to be illegal immigrants from DRC camped along the Ndoki River and the road.

Section 3. Stakeholder issues

All stakeholders we met with were supportive of development activities, including road development in Congo. Those that were supportive of the road development raised the following aspects:

- The road will bring the necessary development for poverty reduction and income-generating programs to this undeveloped region in the Congo.
- It is perceived that the road will sustain the natural resources in the area through providing the GRoC with greater accessibility so law enforcement will become more effective in reducing and preventing poaching in the area. Increased government presence, in addition to education, is the best way to reduce poaching.
- Wildlife will more likely be conserved when local people have another means of livelihood and the road may offer some livelihood alternatives.
- The road is considered very important for individual travel and, as such, much better suited than a rail line.

The central concerns about both the road and Sangha River development can be grouped into the following categories:

- Development
- Environment
- Indigenous Peoples
- Governance

Development:

- Poverty reduction and income-generating programs in Congo have often been premised on assisting and encouraging indigenous peoples to adopt sedentary, agro-pastoral lifestyles. This approach is disruptive of their traditional hunter-gatherer subsistence way of life and in tension with related cultural patterns which some may wish to retain. For indigenous people who do not wish to retain their traditional lifestyles, the

construction of the road and Sangha River development would not be perceived as a problem.

- The assumption that roads will stimulate trade that is crucial to growth and poverty reduction is not borne out by the experience of indigenous peoples and other forest people in the region. For example, in forested areas in SE Cameroon, substantial road building projects over the past 15 years have resulted in substantial increases in local poverty through reduced access to forest resources, loss of forest resource bases, increasing dependency on low waged and unskilled labor, increase in STDs, and an epidemic of alcoholism.
- GDP increases are not a good indicator of poverty reduction since the metric does not account for the increasing unequal distribution of wealth in the region.
- It is not clear what the commercial interests are driving this investment or the commodities that will be transported.

Environment:

- Research has shown that roads and other linear clearings can have an array of deleterious direct, indirect, and cumulative impacts on tropical forests, their wildlife, and peoples. (see photo to the right). A system has not been identified to mitigate these issues in Central Africa.
- The Ndoki wilderness has shrunk by over 11,000 square km in eight years with an increase in roads built to facilitate the extractive industry. Both elephants and chimpanzees are known to alter their behavior depending on their risk assessment of forest roads. In the Congo Basin, forest elephant density in and around protected areas is determined by the area of roadless wilderness, rather than the size of the protected areas since illegal killing is concentrated close to roads. Forest elephants will overwhelmingly refuse to cross an unprotected road, which results in a siege strategy that will likely result in loss of access to

widespread food resources, reduced dietary quality, increased feeding competition, and divide populations.

- The road is likely to encourage increased interest in palm oil investments. Given the World Bank Palm Oil Strategy for Southeast Asia, investors are looking toward Africa for investment opportunities.

Natural resource extraction:

- The extraction of natural resources is on the rise and the road will facilitate increased extraction since the GRoC governance structures do not have the capacity to effectively manage this impact.

Poaching:

- Central African experience strongly indicates that defaunation will occur within 15 km on each side of a road.
- Road construction workers may pose a threat to wildlife in the region. It will be important to look at the dynamics that are happening with the logging companies in the area to understand how they are or not effectively dealing with bushmeat consumption given the large price difference between domestic meat and bushmeat. For example, Loundoungou continues to have a significant consumption of bushmeat because it continues to be cheaper than domestic meat.
- Measures should be evaluated to determine the optimal operation of the road – such as no hunters in cars, no transport of bushmeat or other wildlife items that are not authorized or legal, passenger manifest, control gates, amount of time spent traveling the road and protected buffer zones along the road corridor in sensitive areas.
- Findings from IM-FLEG activities indicate that the government forest control in place is unable to detect or prevent illegal activities, in part due to few controls and sanctions.

Indigenous Peoples:

- Road impacts (construction, operation; direct, indirect, cumulative) will have a high probability of disrupting both revenue and food sources (e.g., caterpillar trees) used by indigenous peoples.
- Further development of the Sangha River upstream from Ouesso will likely have an impact on the local people since fish stocks may be affected and, in some cases, 80% of revenue is based on fisheries.
- The change from a subsistence based to cash-based economy will be accelerated with the road and since money will be required for everything (e.g., children going to school), the road will create incentives for local people to switch to livelihoods which generate cash.
- It is expected that the Bantu will capture the land along the road and further marginalize the indigenous people.
- The UN HRC Special Rapporteur report (2011) states that the new 2011 Indigenous Peoples law provides for consultations and Article 3.6 "specifically states that the consultations must be carried out in good faith, without pressure or threat, and with a

view to obtaining the free, prior and informed consent of the concerned indigenous peoples" and "care will need to be taken to ensure that the consultation procedure is devised to have as its objective"… "the obtainment of free, prior and informed consent." There is a marked absence of consultants with a proven track record of working with indigenous communities to promote their concerns and interests within the project planning processes in Central Africa.

- Additionally, the law affirms indigenous peoples' rights to land and natural resources on the basis of traditional patterns of use and occupancy which will require a significant, coordinated effort. The UN HRC Special Rapporteur report also went on to state that the "Government will need to develop and fully implement a new procedure for demarcating and registering lands in accordance with indigenous peoples' customary rights and tenure, and new mechanisms for identifying and securing specific rights in natural resources."

Figure 4. Newly constructed logging road negatively impacting the flooded forest area (Ndoki River).

Other issues:

- The road may increase refugee flows from CAR, Cameroon, and DRC which could create negative impacts on local populations and the natural resource base upon which they depend.
- The increased potential for illicit trafficking in a variety of nonforest products (e.g., humans, drugs) has been found in other areas of the world related to enhanced infrastructure transport networks.

Section 4: Recommendations

- The project will need to ensure a robust environmental and social impact assessment in order for decision-makers to have all the relevant information prior to a final decision. This will include the following:

- A thorough, unbiased and transparent alternatives analysis designed to ensure that environmental and social considerations are taken into account during the decision-making process. Ideally, the analyses of alternatives should look beyond location or design issues to consider alternate means of achieving the development objectives of the project. The alternatives analysis needs to include a "no action" alternative. This analysis provides a benchmark, enabling decision-makers to compare the magnitude of environmental and social effects of the action alternatives. Additionally, the alternatives should consider not only road but also should include rail. In the absence of such considerations, the EIA tends to be directed to supporting or affirming a project proposal.

  Given the interest of the cities alongside the Oubangui River to be linked by a road system and within easy reach of Bangui (CAR), another alternative should consider building the road from Ouesso to Impfondo. The study should investigate the feasibility and cost of this option relative to other potential routes. Ideally, the study would also take into account economic potential of these cities.
- The process of analyzing cumulative effects can be thought of as enhancing the traditional components of an environmental impact assessment: (1) scoping, (2) describing the affected environment, and (3) determining the environmental consequences. Generally, it is also critical to incorporate cumulative effects analysis into the development of alternatives for the EIA. Only by reevaluating and modifying alternatives in light of the projected cumulative effects can adverse consequences be effectively avoided or minimized. Considering cumulative effects is also essential to developing appropriate mitigation and monitoring its effectiveness.
- Appropriate baseline data, gathered over a sufficient period of time, including seasonal variation, is required to assess the scope of impacts and to identify prevention and/or mitigation measures.

- The impacts of the current roads – Ndoki 1 and Ndoki 2 – should be assessed in order to get a good understanding of the broader ecosystem impacts on wildlife, vegetation, and increased human access to the area where the impacts are currently occurring. Due to the construction of the road, and impacts of logging, elephants are now concentrating along the big flooded forest area (Ndoki River in the CIB logging concession) and thus with increasing human access the elephants are more vulnerable to poaching. Due to obstructions, the change in water flow quantity and, possibly quality, is impacting vegetation.
- The study needs to take into account: 1) that these forests represent some of the last remaining stands of High Conservation Value forests (HCV), 2) the area is currently in the process of World Heritage Site designation, and 3) the presence of globally threatened and endangered species. These points are particularly pertinent given the rapid decline of HCV forests in the Congo Basin. In fact, although not yet officially classified, personal communication with forest elephant experts indicates that the forest elephant should be reclassified from endangered to critically endangered. This area also has the last intact populations of western lowland gorillas and chimpanzees.
- Experience to date has shown that infrastructure projects have resulted in wide-spread illegal logging, rampant poaching, and other negative environmental and social impacts due to either inadequate mitigation measures or measures not properly operationalized or

practical. The study needs to include a component that identifies mitigation strategies that can be effective in Central Africa to address social and environmental impacts.

- The study will need to look at the dynamics that are happening with the logging companies in the area to understand how they are or not effectively dealing with bushmeat consumption given the large price difference between domestic meat and bushmeat.
- The study should determine the number of anti-poaching patrols required and implemented prior to initiation of construction. Baseline data from anti-poaching patrols should be established prior to construction to be able to determine the impact of construction workers and the road.
- Participatory land use mapping needs to be undertaken so the forest areas and usage zones can be mapped. However, this needs to involve more than one or two members (the group should include women, different ages, etc.) and chosen by the population in a full community meeting, where the purpose of the exercise is discussed. The use of a GPS using iconic software developed for hunter-gathers' use and corresponds with the local populations' use of the forest is preferable.
- Based on discussions with experts in the area of indigenous peoples, specifically the Mbendjele peoples and documents, an independent expert with long term experience with these indigenous populations, who has an understanding of the particular difficulties in achieving effective participation of these peoples due to the structure of their societies, cultural/spiritual properties of the forest, and many other factors to lay the foundation for better informed project consultations should be engaged in the study.
- The study should examine the GRoC capacity and technical needs in order to effectively mitigate impacts associated with the proposed project.
- The study should look closely at transboundary immigration issues associated with transport infrastructure – DRC refugees, CAR, and Cameroon.
- The study should look closely at the impacts of transport infrastructure and potential illicit trafficking in the region (e.g., humans, drugs).

Laos - National Route 3

(December 2011)

Prepared by Leslie Johnston

USAID/Washington, EGAT/ESP

USAID/EGAT, USAID/RDMA and USDA staff conducted a site visit to Lao PDR's National Route 3 located in the Greater Mekong Subregion (GMS) North-South Economic Corridor. The site visit was carried out as part of USAID's responsibilities under the International Financial Institutions Act, Title XIII, Section 1303(a)(3), which requires USAID to review multilateral development bank (MDB) projects with potential adverse environmental and social impacts. The site visit was conducted from December 5-15, 2011.

This report summarizes information obtained from meetings with a variety of stakeholders (e.g., government, NGOs, researchers) in Vientiane, local populations and government officials, and available documents. The stretch of National Route 3 visited was from Houey Xai to Luang Namtha to Boten. Other areas branching off of Route 3 also visited were Ban Mom and Muang Sing. The meetings focused primarily on the environmental and social aspects of transportation development. The report does not reflect the views of USAID or of the United States Government (USG), and USAID has not substantiated all comments.

This report is divided into the following sections:

Section 1. Background Information
Section 2. Project Information
Section 3. Stakeholder Issues
Section 4. Recommendations

Section 1. Background Information

GMS Economic Corridors: The Greater Mekong Subregion (GMS) countries (Thailand, Cambodia, Laos, Vietnam) have adopted a strategy to enhance trade connectivity and improve competitiveness. Toward that goal, countries are focused on nine priority sectors (e.g., transportation, telecommunication, etc.) and three priority geographical areas. The GMS North South Economic Corridor (NSEC) is one of the three priority geographical areas. The NSEC encompasses the area along the main north–south transport routes that link the economic hubs in the central and northern areas of the GMS subregion extending from Kumming, China to Bangkok, Thailand.

Nam Ha National Protected Area (NPA): The Nam Ha NPA is located within the Laos section of the NSEC. The NPA covers 222,400 ha and connects to the Xishuangbanna Biodiversity Conservation Corridor in southern Yunnan Province. It is comprised of three primary areas of high importance (core zones), a buffer zone and management zone. In collaboration with Conservation International conservation activities in China, there are joint patrols of northern sections of Nam Ha NPA and Shiang Yong PA (located in China's Xishuangbanna Biodiversity Corridor) staff. This collaboration was initiated in 2006 to enhance the management of forest fires and elephant border crossing issues.

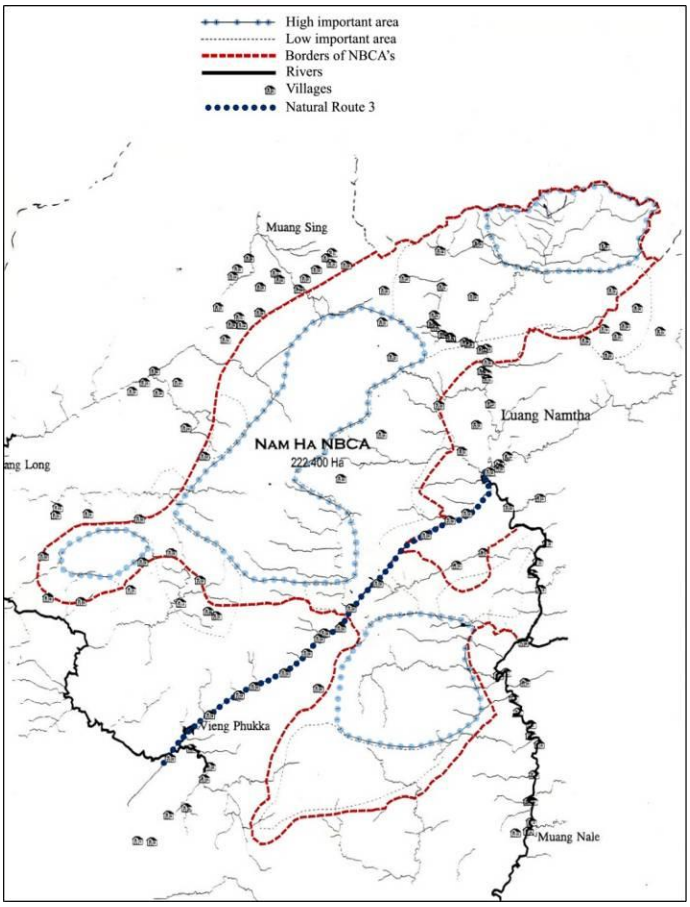


Figure 1. Map of Nam Ha NPA showing core zones (red).

Since the Wildlife Conservation Society withdrew technical and financial support from the NPA in 2001, it has received very limited attention and funding to mitigate existing and [increasing] new threats, which include: deforestation for cropping and rubber plantations, wildlife hunting (consumption and trade), unsustainable collection of nontimber forest products (NTFP), and illegal logging. Management for the NPA consists of nine staff, including the director (1), administrator (1), and rangers (7), which given the size of the area is not adequate to effectively manage the area and its natural resources. There is also a lack of technical capacity and resources to establish wildlife/NTFP monitoring programs and conduct anti-poaching patrols.

Villages: There are 22 ethnic minority villages inside the NPA; and three villages are located along Route 3 and at least 30 villages adjacent to the NPA. Household production consists of

rice and vegetable crops and small scale poultry and pig farming. Wildlife hunting is still a critical component to rural livelihoods in Laos. Products purchased from outside are primarily clothes and cheap electronics from China and some beverages and toiletries from Thailand. There are also stretches of rubber plantations within the NPA's management zone and some rice cropping right next to the buffer zone.

Villagers inside the NBCA usually collect NTFPs daily, but reported that it is getting more difficult to find NTFPs and therefore they are required to walk longer distances to find adequate amounts. The most frequently hunted animals were squirrel, bamboo rat, snake and partridge, while the endangered species like tiger and black-cheeked crested gibbon were reported as decreasing in abundance. Some species may avoid areas adjacent to highways due to noise and human activity as they now rarely appear to these villagers, except in the deep forest area.

The road to Muang Sing (Laos-China Border) transects the northern part of the NPA. On the drive to the village, two boys were selling a snake (15,000 kip), a giant squirrel and a slow loris on the roadside. It is reported that wildlife is more commonly available along this stretch of road than on R3 because there is less official scrutiny. The Akha hill tribe lives in this area. They are primarily hunters and have stayed more in the hills than other ethnic groups that have been moved into towns.

Ecotourism: Ecotourism has been marketed as an approach to conserve biodiversity and promote economic development by linking environmentally related enterprises to the promotion of conservation. A study was undertaken and published in 2009, examining whether ecotourism in Nam Ha NPA has contributed to the preservation of the critically endangered western black crested gibbon (*Nomascus concolor*) populations and whether it has enhanced biodiversity in the NPA. The study found that the ecotourism project has failed to preserve gibbon populations; in 2005/06 the small populations detected in 2003 surveys were not detected. The study recommended that there needs to be a revenue sharing scheme to address the inequities at the village level of the Nam Ha Ecotourism Project since villages will only receive a benefit when they are visited by trekkers. However, in order to preserve wildlife populations the broader landscape must be protected, not just village by village.

Plantations: The opening of National Route 3 has enabled increased investment of rubber plantations by Chinese investors. It was reported that Luang Namtha Province suspended new approvals of rubber plantations in early 2008 due to environmental issues (rapid deforestation resulting in floods and landslides) and an interest in promoting alternative agricultural products.

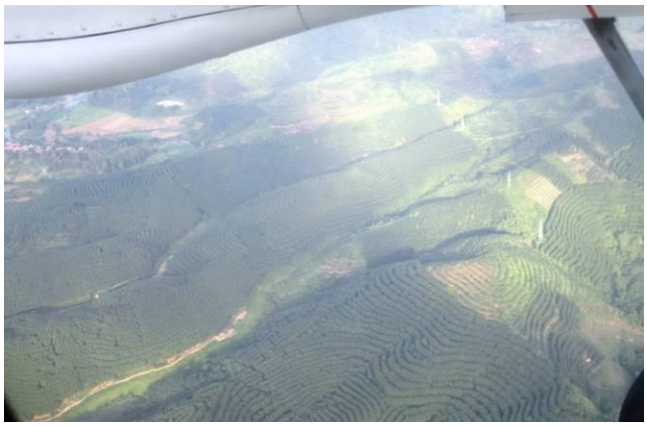


Figure 2. Aerial view of rubber plantations around Luang Namtha.

At that time 100,000 ha was approved of which only 20% had actually been planted. Consequently, approved plantations are encroaching on traditional agriculture patterns.

Illicit trafficking: A draft report from the UN Office on Drugs and Crimes has identified as an emerging issue the relationship between infrastructure and illicit trafficking in the Greater Mekong Subregion. Although there are several institutions involved in infrastructure and trade facilitation, the draft report focused on ADB since it is one of the lead agencies coordinating and funding investment in infrastructure and trade facilitation in the GMS. Recognizing that with development there will be some costs, the following issues were identified: environmental damage, involuntary resettlement, spread of HIV/AIDS, prostitution, drug abuse/trafficking, and labor exploitation in the form of human trafficking. The study found that there are serious concerns that need to be urgently addressed and systematically included in the planning and risk assessment of agencies that coordinate and finance infrastructure projects. For example:

- The NSEC is close to, and partially transits, the Golden Triangle and nearby communities identified in the annual UNODC Opium Survey as at risk of reverting to opium farming.
- The GMS Economic Corridors overlap with biodiversity areas identified by the GMS Core Environmental Programme with corresponding improved access into forests. Additionally, these corridors also link source countries and destination countries for illicit timber and wildlife trade.
- Based on the UNODC's Database on Human Trafficking Trends, the GMS Economic Corridors link source countries and destination countries.

Recommendations from the report include:

- Systematically include law enforcement and customs concerns into the planning and safeguard processes at the project level of infrastructure development.
- Facilitate information sharing between transport analysts, public security agencies, and health officials to provide opportunities for pro-active responses to trafficking and drug abuse.
- Improve cross border cooperation and information exchange, through the Border Liaison Office functions.

Ban Mom is a port town on the Mekong River across from the Myanmar port town of Wang Pong and is located in the Golden Triangle Economic Zone. It is about a 30-60 minute drive north of Huay Xai (R3). The area is developing quickly as a tourist center with the presence of a large Chinese casino, opulent homes along the main road in Ban Mom, luxury vehicles and a number of new multi-unit residences under construction that will accommodate clientele of the casino. The Myanmar side of the Mekong is also being actively developed with casinos, according to reports. It was reported that human trafficking is a concern in this area as North Koreans and Burmese try to migrate to Thailand via Laos.

Figure 3. Casino development in Ban Mom (left) and casino development directly across the Mekong River in Myanmar (right).

Figure 4. Development in Ban Mom. Private homes (left) and residences to support the casino (right).

Boten is on the Laos-China border. It is known for its casinos, which are temporarily closed due to serious gambling related crimes. The border checkpoint is still active. It was reported that lignite and various species of timber from Laos and Burma are exported into China. During our visit, one truck loaded with unprocessed round logs passed through Boten into China, in addition to several trucks with timber that had been processed. The export of unprocessed, round logs is illegal in Lao. Products imported from China include: cloth, cheap electronics, motorcycles, fertilizer, and fruits/vegetables.

Figure 5. Border crossing at Boten.

Section 2. Project Information

National Route 3: The Laos portion of the NSEC – National Route 3 (R3) – is a ~230 km stretch from Huai Xai in Bokeo Province through 35 km of the Nam Ha NPA to Boten in Luang Namtha Province. It was reported that Laos was initially reluctant to build the road because of the high cost of construction due to its mountainous terrain, combined with limited benefits to Laos. At that time, the road was seen as more beneficial to China and Thailand, with Laos serving as a transit corridor. The various sections of R3 were financed through Thai, Chinese, and ADB loans. Construction on the road was started in 2004 and completed in early 2008. The ADB financed a 75 km section of the road, of which 35 km runs through the Nam Ha NPA. Although the ADB loan was closed in June 2009, the ADB remains committed to the safe operation of the road.

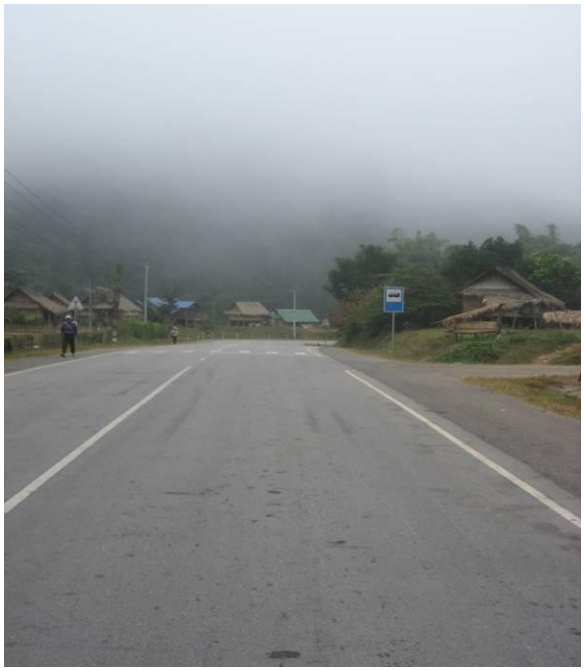


Figure 6. R3 entering a village in Nam Ha NPA.

Road traffic consists primarily of trucks transiting through Laos going to either Thailand or China. Local Lao traffic is also present (e.g., minibuses, private cars, and motorcycles). Legal products crossing into Laos from Thailand at Huay Xai include seafood, petroleum, and limestone. Lignite mined in the region is trucked into China. However, as a result of poor construction and heavy truck loads, sections of the road west of Nam Ha NPA were under construction at the time of the site visit.

In addition to ADB's financing of the road the following projects and assistance were also provided:

- ADB has supported the Luang Namtha Province, Nam Ha Catchments Area Development Project within the NPA. This project ended in 2009 and an Implementation Completion Memorandum for Japan Fund for Poverty Reduction Grant 9062: Sustainable Agroforestry Systems for Livelihoods Enhancement of the Rural Poor is under review and should be finalized during the second quarter of 2012.

  When asked about the project, villagers either said that the project brought them clean water or were not knowledgeable about it. At the time of our visit, we could not determine based on discussions with villagers if the project was still active.

- GMS Sustainable Tourism Development Project is ongoing and will continue through December 2013. The main activities supported by the project in Luang Namtha and Bokeo provinces include: tourism management/hospitality training; guide training; handicraft design, production and marketing; information/education campaigns on biodiversity conservation; tourism related infrastructure improvements; and investment promotion. Small infrastructure improvements include the Nam Ha NPA Visitors

Center, community market in Ban Chalensouk, and tourism facilities improvement at the Nam Eng Cave.

Villagers in Ban Chalensouk reported that the project started about 7-8 years ago. This village is right outside of the NBCA toward Luang Namtha. About 3-4 households have joined the project. It has helped with income, but is not considered a super success. Foreign tourists stay only 1-2 nights.

- Strengthening the Lao government's capacity for environmental monitoring, including training on issues related to protected areas and wildlife trafficking, use of geographic information systems and other information gathering techniques, assembling technical expertise and advice, and the development of a manual on environmental monitoring plans and procedures.

  Capacity building, basic training courses were provided to the Nam Ha NPA management board and GIS training was provided to the technical staff. The GIS training is considered very useful for landscape monitoring, but the continuity of GIS monitoring is lacking due to trained staff being relocated to other NPAs.

  The manual of environment monitoring plans and procedures was developed with support of WWF & IUCN (subcontracted from ADB). However, based on further discussions with stakeholders, the manual has been barely implemented by Nam Ha NPA in collaboration with related government agencies due to very limited human and financial resources.

- To assist officials in monitoring illegal wildlife hunting, trade and slash-burn activities, ADB provided radio-communication sets for use at the police and forestry checkpoints in and near Nam Ha NPA.

  Based on further discussions with stakeholders, rangers and local people in the patrol groups use their personal mobile phones for communication during the patrols.

- ADB stated that measures were implemented during the initial road construction to ensure connectivity for wildlife between the NPA core areas. Within the Nam Ha NPA, two oversized culverts were constructed to serve as both drainage structures and wildlife crossings. One structure is an oversized pipe culvert (1500 mm diameter) and the other structure is a box culvert (3 m x 3 m) for larger species.

  Based on further discussions with stakeholders, ADB and Laos government agreed not to build the culverts because they understood that the existing small culverts within the NPA could be used for drainage and wildlife crossing instead. The small culverts are located in the management zone, and not in the core zone.

- ADB assistance provided capacity building to the Environmental Research Institute; Science, Technology and Environment Agency; Provincial Science, Technology and Environment Unit of Bokeo and Louang Namtha provinces.

  There is potential opportunity for continuing support through ADB's Core Environment Program and Biodiversity Conservation Corridors Initiative (CEP-BCI). ADB reported that further support for environmental management strengthening will also be explored under the recently approved Phase II of CEP-BCI. With respect to corridor crossings, ADB stated that the current capacity of Nam Ha NPA staff to undertake monitoring of wildlife crossings will be determined as part of the CEP-BCI. Findings of the ensuing monitoring to be conducted by Nam Ha NPA staff will then serve as the basis for its management board to implement necessary measures to ensure connectivity between the core areas.

Section 3. Stakeholder Issues

R3 has brought a number of positive developments to the surrounding areas. All villagers spoken to highlighted that as a consequence of the road they now have access to: electricity, public transportation, water (through ADB's water catchment project), schools and enhanced access to markets and goods from China and Thailand.

R3 has also brought a number of negative impacts to the more than two dozen villages adjacent to the highway. These impacts include: noise and air pollution from day and night truck traffic and safety issues due to the speeds traveled by the vehicles. Although no villagers reported deaths, at least two boys have been hit by vehicle traffic and the families had to pay for the costs of medical care. Some homes had to be relocated and were compensated by the government.

R3 cuts through 35 km of the Nam Ha NPA, isolating two of its three core biodiversity areas. Since the road has been completed, impacts cited include:

- Limited to absence of wildlife movement between the core areas separated by the road
- expansion of agriculture and rubber plantations outside and inside of the NPA (management and buffer zones)
- increased hunting and NTFP collection
  - Easier access to natural resources by urban residents. This is resulting in an increase in the number of outsiders coming into the NBCA to hunt and collect NTFP. There are at least three restaurants in Luang Namtha that serve bushmeat.
  - Villagers are hunting and selling wildlife in the markets.
  - Chinese middlemen come to the villages to buy wildlife and medicinal plants.
- increasing urbanization as villages move closer to the road
- areas of landslides/erosion

Figure 7. Erosion along R3 in Nam Ha NPA.

Figure 8. Rubber plantation in management/buffer zone.

Correspondence with ADB management provided the following information on several of the issues cited above by stakeholders:

Traffic speed going through villages:

The Ministry of Public Works and Transport (MPWT) has stated that the speed limits through communities are posted on traffic signs and range from 40-60 kph. In general, control of traffic speed is the responsibility of provincial traffic police. MPWT will install additional guardrails and traffic signs on R3 using funds from a WB-financed project. Other measures to reduce speed – e.g., speed bumps are not considered an appropriate intervention for Route 3.

Figure 9. Road signage on R3.

Additional safety measures such as street lights and/or sidewalks:

MPWT will consider the installation of street lighting power by solar cells in areas with high frequency of accidents, especially at road junctions and in high-density community areas. Sidewalks are not considered an appropriate intervention for national roads in rural areas.

Road maintenance:

ADB is discussing with MPWT the issue of erosion and appropriate control measures. At this time, MPWT does not have sufficient funds available; therefore, other financing options are being explored.

Vulnerable livelihood:

Household of local communities depends on access to natural resources. R3 has intensified transportation and access to natural resources. There are higher demands of timber and NTFPs, wildlife consumption, commercial plantations of rubber and other crops from increasing wealth for some sectors of neighbor countries, particularly China

that has high population pressure and fast economic growth. However, there is no provincial and local development plan to minimize vulnerability of its infrastructure, ecosystems and natural resources and Nam Ha NPA does not yet have a monitoring and evaluation system for wildlife population and impacts from current logging and hunting practices. Local people are still unaware of biodiversity loss and habitat degradation and how it affects their livelihood.

Section 4. Recommendations

- Luang Namtha's provincial and local development plan should be revisited to ensure a more integrated ecosystem based approach to avoiding, minimizing, and mitigating impacts of infrastructure and associated development.
- To mitigate transboundary environmental impacts, concerted effort should be put into carrying out a cumulative impact assessment and strategic environmental assessment.
- Budget and staffing support is required to ensure that the Nam Ha NPA is effectively managed. This would require establishing and implementing a NPA monitoring system to gain a better understanding of the status/trends of wildlife populations and current/emerging threats.
- Provide mitigation measures that allow for wildlife movement between Nam Ha NPA's core zones.
- Since R3 increases regional transportation connectivity, there are increased exposures for transboundary forest fragmentation and illegal wildlife and timber trafficking either sourced from the NPA or from other countries and transiting through to China. Measures to address this include:
    - Develop strategy for long-term land use monitoring to control rapid urbanization and ensure sustainable resource and environmental management.
    - Establishing and implementing a robust anti-poaching patrol network that covers the entire NPA to enforce existing regulations to control wildlife and NTFP harvesting.
    - Establishing functional road checkpoints on R3 at the borders of the NPA.
    - Expand the Border Liaison Offices mandate to include checking for wildlife and timber with associated training.
    - Strengthening regional collaboration on anti-trafficking networks between ASEAN-WEN and China.
- Systematically assess and implement the recommendations from the UNODC draft report on illicit trafficking.

U.S. Agency for International Development
1300 Pennsylvania Avenue, NW
Washington, DC 20523
Tel: (202) 712-0000
Fax: (202) 216-3524
www.usaid.gov